AMENDMENT TO THE CLAIMS

Claim 1. (Currently Amended) A compound of the formula I

$$G(-O_2CR')_m(-OH)_n(-O_2C(CH_2)_pCH_3)_q$$

I

wherein

G is a C_3 to C_5 branched or straight carbon chain and $(-O_2CR')$, (-OH) and $(-O_2C(CH_2)_pCH_3)$ are attached to any available carbon atom along G;

m is an integer from 1 to 4;

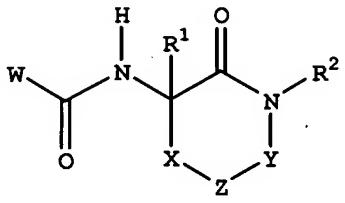
n is an integer from 0 to 3;

p is an integer from 0 to 16;

q is an integer from 0 to 3;

where the sum of m, n and q is 3 or 4; and

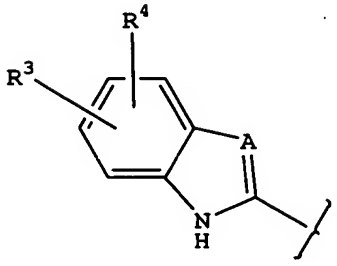
$-O_2CR'$ is a fragment of a compound of formula

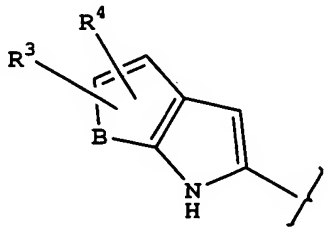


Ib

wherein

W is a bicyclic hetroaryl of the structure





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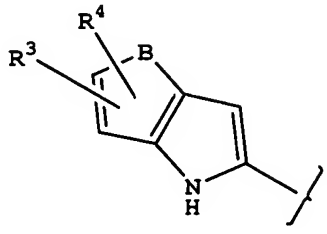
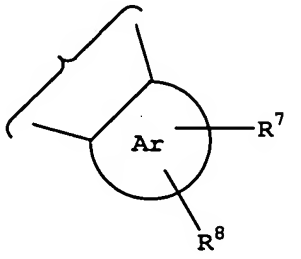


X is ~~-O-, -S-, -SO_2-,~~ -CHR^5-[[,]] ~~-CHR^5O-, -CHR^5S-, -CHR^5SO_2-, -CHR^5CO-~~ or -CH_2CHR^5-;

Y is a bond or –CHR^6-;

Z is an aryl or heteroaryl group of the following structure:



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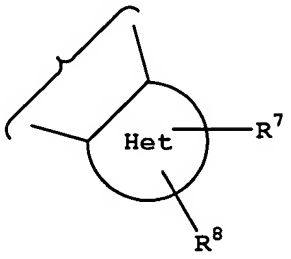


;

A is –CH- or –N-;

B is –O- or –S-;

R^1 is hydrogen, alkyl, aryl or alkenyl;

R^2 is hydrogen, alkyl, aryl, arylalkyl, heteroarylalkyl or alkenyl;

R^3 and R^4 are each independently hydrogen, halo, trifluoromethyl, cyano, alkyl or alkoxy;

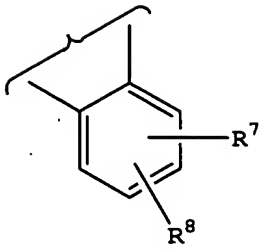
R^5 and R^6 are each independently hydrogen, alkyl, aryl, alkenyl, CN, CN_4R^{9A} (tetrazole), CO_2R^{9A}, $CONR^{9A}R^{9B}$ or $CONR^{9A}OR^{9B}$;

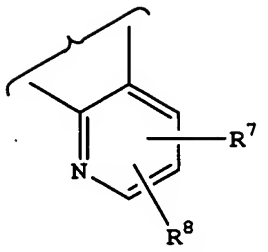
R^7 and R^8 are each independently hydrogen, halo, trifluoromethyl, cyano, hydroxy, a hydrogen bonding group, alkyl, alkoxy, aryl, arylalkyl, heteroarylalkyl, aryloxy or alkenyl; and

R^{9A} and R^{9B} are independently hydrogen, alkyl, arylalkyl, heteroarylalkyl or aryl, or R^{9A} and R^{9B} may optionally be cyclized together to form a ring, wherein said ring may further be substituted with one to three additional hydrogen bonding groups;

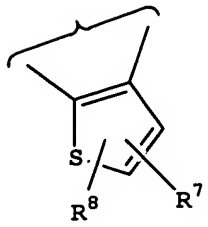
wherein when R^1, R^2, R^5, R^6, R^7 and R^8 are alkyl, aryl, alkenyl, arylalkyl, heteroarylalkyl, alkoxy or aryloxy, R^1, R^2, R^5, R^6, R^7 and R^8 may each independently be substituted with 1 to 3 hydrogen bonding groups.

Claim 2. (Original) The compounds as defined in claim 1 wherein Z is an aryl or heteroaryl group of the structure





or



Claim 3. (Original) The compound as defined in claim 1 wherein said hydrogen bonding group is selected from the group consisting of OR^{9A}, OCO_2R^{10}, $OCONR^{9A}R^{9B}$, CN, NO_2, CN_4R^{9A} (tetrazole), $COCF_3$, COR^{9A}, CO_2R^{9A}, $CONR^{9A}R^{9B}$, $CONR^{9A}OR^{9B}$, $C(NR^{9A})NR^{9B}R^{9C}$, $CONR^{9A}SO_2R^{9B}$, SOR^{10}, SO_2R^{10}, SO_3H, $SO_2NR^{9A}R^{9B}$, $SO_2NR^{9A}COR^{9B}$, $SO_2NR^{9A}CONR^{9B}R^{9C}$, $POR^{9A}R^{9B}$, $PO_2R^{9A}R^{9B}$, $PO_3R^{9A}R^{9B}$, $PO_2R^{9A}NR^{9B}R^{9C}$, $NR^{9A}R^{9B}$, $NR^{9A}COR^{9B}$, $NR^{9A}C(NR^{9B})R^{9C}$, $NR^{9A}CO_2R^{9B}$, $NR^{9A}CONR^{9B}R^{9C}$, $NR^{9A}C(NR^{9B})NR^{9C}R^{9D}$, $NR^{9A}SO_2R^{9B}$, $NR^{9A}CONR^{9B}SO_2R^{9C}$, $NR^{9A}SO_2NR^{9B}R^{9C}$, $NR^{9A}POR^{9B}R^{9C}$, $NR^{9A}PO_2R^{9B}R^{9C}$, $NR^{9A}PO_3R^{9B}R^{9C}$ and $NR^{9A}PO_2R^{9B}NR^{9C}R^{9D}$; wherein

R^{9C} and R^{9D} are each independently hydrogen, alkyl, arylalkyl, heteroarylalkyl or aryl; and

R^{10} is independently alkyl, arylalkyl, heteroarylalkyl, or aryl;

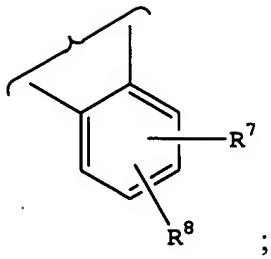
wherein R^{9A}, R^{9B}, R^{9C}, R^{9D} or R^{10} may further be substituted with one to three additional hydrogen bonding groups; and wherein two of R^{9A}, R^{9B}, R^{9C} or R^{9D} within the same hydrogen bonding group may optionally be cyclized together to form a ring, wherein said ring may further be substituted with one to three additional hydrogen bonding groups.

Claim 4. (Original) The compound as defined in claim 1 where ($-O_2CR'$) represents a fragment of compounds of formula Ib wherein R^5 or R^6 is CO_2-, or wherein one or more of R^1, R^2, R^5, R^6, R^7 and R^8 is alkyl, aryl, alkenyl, arylalkyl, heteroarylalkyl, alkoxy or aryloxy, and one of R^1, R^2, R^5, R^6, R^7 and R^8 is substituted with or contains a fragment of structure CO_2-.

Claim 5. (Original) The compound as defined in claim 1 wherein

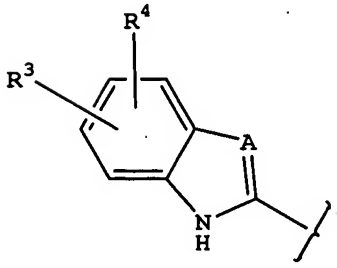
R^1 is hydrogen;

Z is



; and

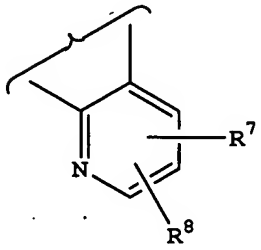
W is



Claim 6. (Original) The compound as defined in claim 1 wherein

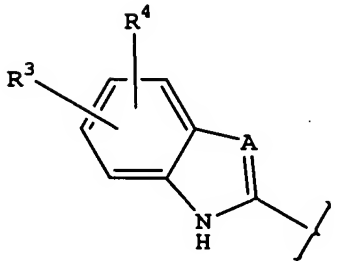
R^1 is hydrogen;

Z is



; and

W is



Claim 7. (Original) The compound as defined in claim 1 wherein W is 5-chloroindol-2-yl.

Claim 8. (Currently Amended) The compound as defined in claim 1 where ($-O_2CR'$) represents a fragment of compounds of formula Ib wherein

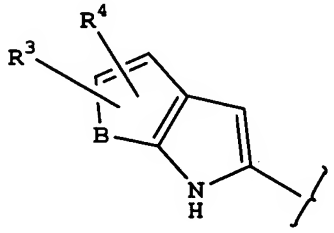
X is $-CHR^5-$[[,]] ~~$-CHR^5O-$, $-CHR^5S-$, $-CHR^5SO_2-$, $-CHR^5CO-$~~ or $-CH_2CHR^5-$;

Y is $-CHR^6-$; and

R^5 or R^6 is CO_2-.

Claim 9. (Currently Amended) The compound as defined in claim 1 wherein

W is



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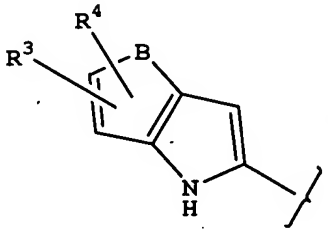
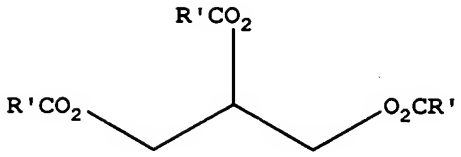
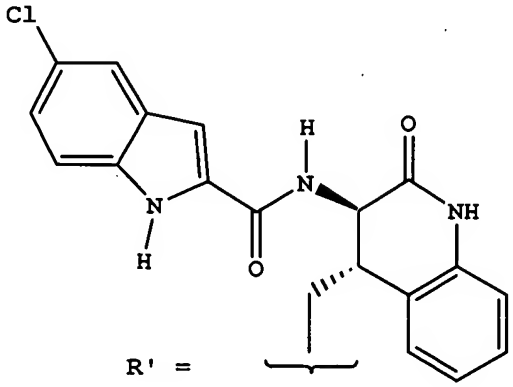


, and

n is 0.

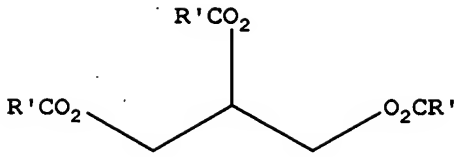
Claim 10. (Currently Amended) The compound as defined in claim 1 having the structure

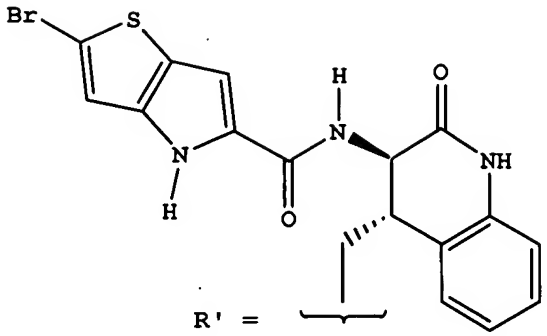




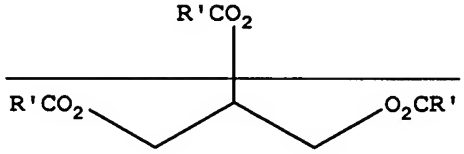
R' =

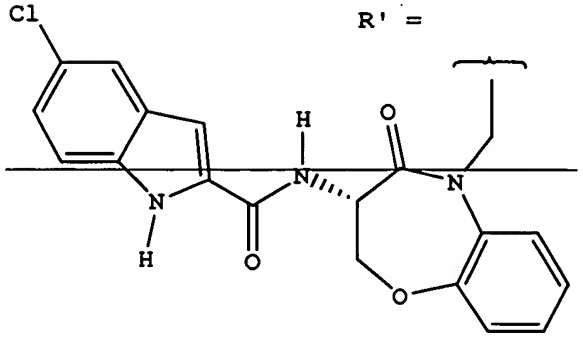
or


R'CO2
R'CO2
O2CR'

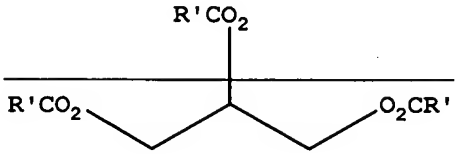

Br
S
H
N
O
N
H
O
NH
R' =

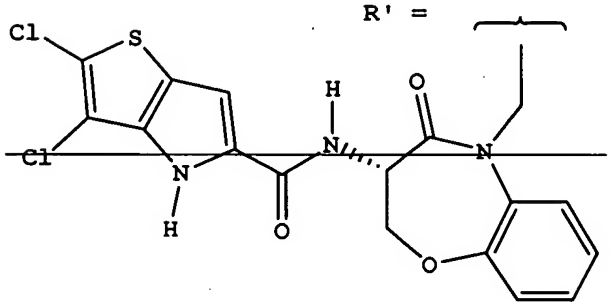
or


R'CO2
R'CO2
O2CR'

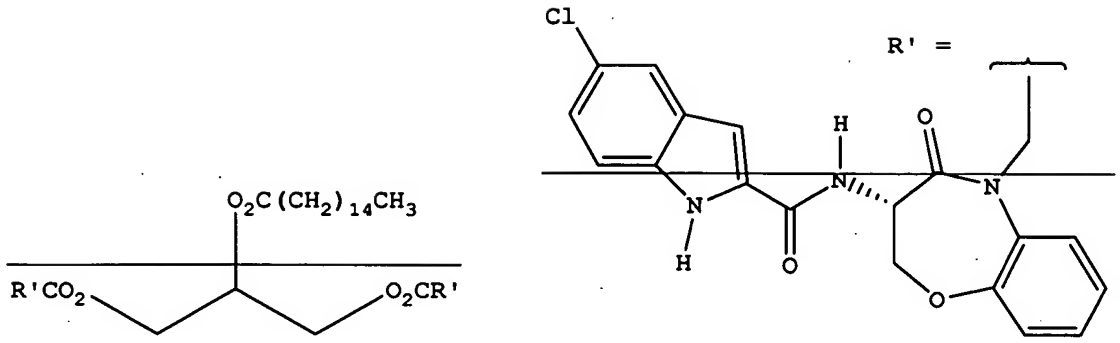

Cl
R' =
H
O
N
N
N
H
O
O

[[or]]


R'CO2
R'CO2
O2CR'


R' =
Cl
S
Cl
H
O
N
N
N
H
O
O

[[or]]



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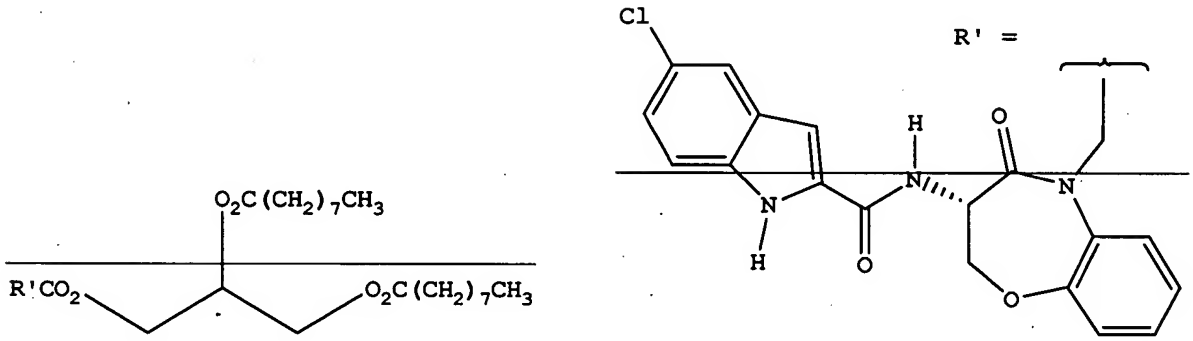

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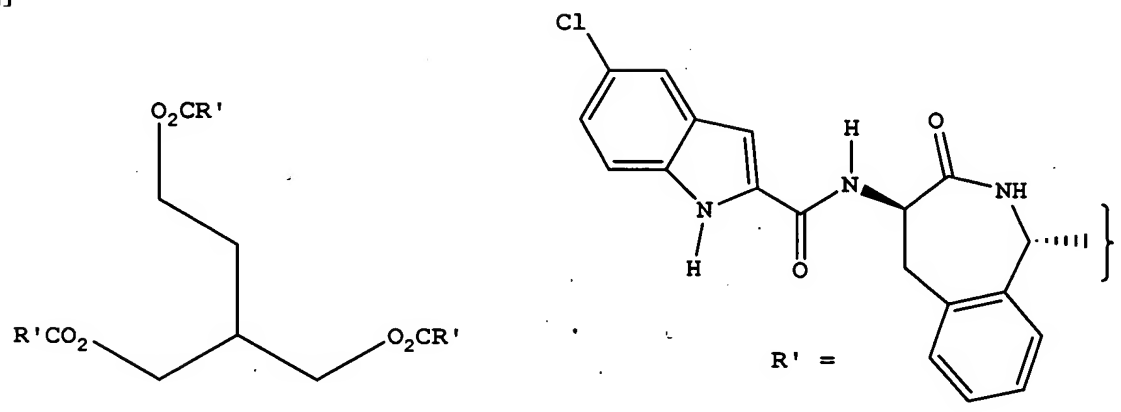

Claim 11. (Original) A pharmaceutical composition comprising a compound as defined in Claim 1 and a pharmaceutically acceptable carrier therefor.

Claim 12. (Withdrawn) The pharmaceutical composition of claim 11 further comprising at least one additional therapeutic agent selected from the group consisting of other compounds of

formula I, anti-diabetic agents, anti-obesity agents, anti-hypertensive agents, anti-atherosclerotic agents and lipid-lowering agents.

Claim 13. (Withdrawn) The pharmaceutical composition of claim 12 comprising a compound of formula I and at least one anti-diabetic agent.

Claim 14. (Withdrawn) The pharmaceutical composition of claim 13 wherein the antidiabetic agent is at least one agent selected from the group consisting of a biguanide, a sulfonyl urea, a glucosidase inhibitor, a PPAR-alpha agonist, a PPAR-gamma agonist, a PPAR alpha/gamma dual agonist, an aP2 inhibitor, an SGLT2 inhibitor, a dipeptidyl peptidase-IV inhibitor, an insulin sensitizer, a thiazolidinedione, a glucagon-like peptide-1 (GLP-1), an aldose reductase inhibitor, a sorbitol dehydrogenase inhibitor, insulin and a meglitinide.

Claim 15. (Withdrawn) The pharmaceutical composition of claim 13 wherein the antidiabetic agent is at least one agent selected from the group consisting of metformin, glyburide, glimepiride, glipyride, glipizide, chlorpropamide, gliclazide, acarbose, miglitol, pioglitazone, troglitazone, rosiglitazone, insulin, Gl-262570, isaglitazone, JTT-501, NN-2344, L895645, YM-440, R-119702, AJ9677, repaglinide, nateglinide, KAD1129, AR-HO39242, GW-409544, KRP297, AC2993, LY315902 and NVP-DPP-728A.

Claim 16. (Withdrawn) The pharmaceutical composition of claim 12 wherein the anti-obesity agent is at least one agent selected from the group consisting of a beta 3 adrenergic agonist, a lipase inhibitor, a serotonin (and dopamine) reuptake inhibitor, a thyroid receptor beta compound and an anorectic agent.

Claim 17. (Withdrawn) The pharmaceutical composition of claim 12 wherein the anti-obesity agent is at least one agent selected from the group consisting of orlistat, ATL-962, AJ9677, L750355, CP331648, sibutramine, topiramate, axokine, dexamphetamine, phentermine, phenylpropanolamine and mazindol.

Claim 18. (Withdrawn) The pharmaceutical composition of claim 12 wherein the lipid lowering agent is at least one agent selected from the group consisting of an MTP inhibitor, cholesterol ester transfer protein, an HMG CoA reductase inhibitor, a squalene synthetase inhibitor, a fibric acid derivative, a cholesterol absorption inhibitor, an ileal Na+/bile cotransporter inhibitor, a bile acid sequestrant, a nicotinic acid derivative, an upregulator of LDL receptor activity, a lipoxygenase inhibitor and an ACAT inhibitor.

Claim 19. (Withdrawn) The pharmaceutical composition of claim 12 wherein the lipid lowering agent is at least one agent selected from the group consisting of pravastatin, lovastatin, simvastatin, atorvastatin, cerivastatin, fluvastatin, nisvastatin, visastatin, fenofibrate, gemfibrozil, clofibrate, avasimibe, TS-962, MD-700, CP-529414, and/or LY295427.

Claim 20. (Withdrawn) The pharmaceutical composition of claim 12 comprising a compound of formula I and at least one anti-hypertensive agent.

Claim 21. (Withdrawn) A method for treating or delaying the progression or onset of diabetes, diabetic retinopathy, diabetic neuropathy, diabetic nephropathy, wound healing, insulin resistance, hyperglycemia, hyperinsulinemia, Syndrome X, diabetic complications, elevated blood levels of free fatty acids or glycerol, hyperlipidemia, dislipidemia, obesity, hypertriglyceridemia, atherosclerosis, glucose intolerance, or hypertension which comprises administering to a mammalian patient in need of treatment a therapeutically effective amount of a compound as defined in claim 1.

Claim 22. (Withdrawn) The method according to claim 21 further comprising administering, concurrently or sequentially, a therapeutically effective amount of at least one additional therapeutic agent selected from the group consisting of other compounds of formula I, anti-diabetic agents, anti-obesity agents, anti-hypertensive agents, anti-atherosclerotic agents and lipid-lowering agents.

Claim 23. (Withdrawn) A method of inhibiting the enzyme glycogen phosphorylase which comprises administering to a mammalian patient in need of treatment a therapeutically effective amount of a compound as defined in claim 1.